

SmART SCHOOLS ASSESSMENT: PHASE 1
Martin Gardiner, Ph.D.
Brown University

Phase I of a three-phase assessment of the SmART Schools programs in Rhode Island is being carried out this summer. The assessment is largely completed, but it will be supplemented with additional academic data that will become available this fall. The major findings to date are summarized below.

Method

Phase 1 compares standardized testing data from the four Rhode Island schools who have implemented SmART programs for three years against other schools in the state as a whole, and also against control comparison schools in the same districts and in one other district. Since the SmART schools are near the University of Rhode Island, and this is likely to have a strong effect on their demographics, the other district we included is one which is also close to the university. Thus we have eight comparison schools to compare with the four SMART schools.

Phase 1 also examines survey data from parents and teachers concerning the schools. Unlike the academic data, comparison data is not available for the state as a whole, but we have again tabulated these data for the comparison schools as well.

Academic Progress

The current climate emphasizing the need for school improvement has spurred the systematic collection of the standardized testing data we are able to examine. The comprehensive testing at the elementary level takes place in the spring of the fourth grade. These results are published and widely discussed. Not surprisingly, all the schools are motivated to do well and expected to show progress. Thus our assessment has to address the fact that general upward trends in performance can be anticipated throughout the state, and thus any comparisons must take this into account.

We anticipated that SmART programs would show evidence of the greatest academic impact in the two areas of testing where students must show the greatest degree of mental creativity: problem solving in mathematics and capability in writing. These are, in fact, exactly the areas where SmART schools differed strikingly from both the state as a whole and the comparison schools.

During the first two years of the program, the SmART schools showed an 8.9% average improvement in percentage of children achieving the high bar standard of the state testing in mathematics problem solving, compared to a 2.1% improvement in the comparison schools. If the figures are adjusted by comparing the performance of these schools against schools of comparable demographics statewide, the difference remains as striking. SmART

schools improve 3.75% over their peers statewide, whereas the comparison schools actually show a 3.2% *loss*.

There are actually two writing assessments: writing effectiveness and writing conventions. In writing effectiveness, the SmART schools show a gain of 22.5% in the first two years of the program compared to an 8% gain in the comparison schools, and 5.15% gain against a statewide demographic match as compared to an 11.4% loss of the controls against their demographic match. In writing conventions, SmART schools show a 3% gain compared to 1.75% loss in comparison schools, and against demographics, the SmART schools' gain is 6.4% compared to 0.5% for the control comparison schools.

Results from academic testing from the third year of the SmART program and from comparison schools and statewide will not be available until the fall. Once published, they will allow testing of the continuation of these trends.

Parent Surveys

Parents' assessment of SmART schools as 'very good' increased by 4.9% during the first two years of the program compared to prior years, with comparison schools increasing by 4.7%. A more sensitive test of parent satisfaction is the percentage of parents who feel strongly that the child is learning as much as they can. Here the SmART schools gained by 3.15% during the years of the program, compared to 0.15% in the comparison schools. (2002 survey data for the schools has already been released). Furthermore, the parents were apparently aware of the innovation within SmART schools. There was an 11.9% increase of parents who agreed strongly that the school was known for trying new programs, compared to 0.05% in comparison school.

Teacher Surveys

Teacher reports confirmed that Integrative Practices had become more frequent in the classroom compared to comparison schools: an average gain of 4.5 compared to 2.075 on the particular metric used by the survey to address this issue.

Conclusion

The limitation of the state testing examined in phase 1 is that it focuses on traditional measures of performance and progress which every school must address, but pays less attention to aspects of school experience and learning that the SmART program is intended to foster (i.e. the development of creativity, curiosity, and joy of learning; a sense of interrelationships within learning; joy of and capability for discovery and exploration). The Salt Visit Report, which is also enclosed, provides such data.